Serial No. 09/960,301

## IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with <u>underlining</u> and deleted text with <u>strikethrough</u>. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 5-11, 15-21 and 25-30 in accordance with the following:

1. (CURRENTLY AMENDED) A method, executed by a broadcasting server, for controlling interlock of an interactive service with data broadcasting, said method comprising:

acquiring information specifying an interactive service associated with data broadcasting and information specifying a service time of said interactive service, wherein said interactive service can be provided from an interactive server over a first communication path to a broadcasting receiver, and said data broadcasting can be provided from said broadcasting server over a second communication path to said broadcasting receiver;

transmitting over a third communication path, said information specifying said interactive service and said information specifying said service time, which are acquired in said acquiring, to said interactive server, which is independent from said broadcasting server, and which executes activates and deactivates an interactive application based on said information specifying said service time, wherein said interactive application is executed by said interactive server and that provides said interactive service over said first communication path to said broadcasting receiver in response to an access from said broadcasting receiver; and

transmitting over said second communication path, to said broadcasting receiver without transferring through said interactive server, data broadcasting contents associated with said interactive service at said service time specified by said information specifying said service time, wherein said data broadcasting contents include link information to access said interactive application executed by said interactive server.

- 2. (PREVIOUSLY PRESENTED) The method as set forth in claim 1, wherein said acquiring includes extracting said information specifying said interactive service and said information specifying said service time from interactive service organization information.
  - 3. (PREVIOUSLY PRESENTED) The method as set forth in claim 2, wherein said

acquiring further includes extracting second information specifying said interactive service from content information of said data broadcasting and comparing the second extracted information with said information specifying said interactive service extracted from said interactive service organization information.

- 4. (PREVIOUSLY PRESENTED) The method as set forth in claim 1, wherein in said transmitting over said third communication path, said information specifying said interactive service and said information specifying said service time, together with content information of said data broadcasting, are distributed to said interactive server.
- 5. (CURRENTLY AMENDED) The method as set forth in claim 1, further comprising generating information as to whether each interactive <u>application service</u> must be activated at present based on said information specifying said service time of each said interactive service, and

wherein in said transmitting over said third communication path, said information as to whether each said interactive <u>application service</u> must be activated at present is further transmitted.

- 6. (CURRENTLY AMENDED) The method as set forth in claim 1, further comprising, if information indicating an operating state of said interactive <u>application</u> service is received from said interactive server, deleting or invalidating designation of an inactive interactive <u>application</u> service in content information of said data broadcasting.
- 7. (CURRENTLY AMENDED) A method, executed by an interactive server that provides an interactive service associated with data broadcasting to a broadcasting receiver, for controlling interlock of said interactive service with said data broadcasting in an interactive server that provides said interactive service associated with said data broadcasting to a broadcasting receiver, said method comprising:

receiving and storing a set of information specifying an interactive service and information specifying a service time of said interactive service from a broadcasting server in one or a plurality of broadcasting stations, wherein said broadcasting server is managed independently from said interactive server;

extracting, from the stored set of said information, a set of information specifying a

specific interactive service having a relation to said interactive server and information specifying a service time of that said specific interactive service by using the received information specifying said interactive service; and

controlling activation and deactivation of <u>an interactive application that is executed by</u>
<u>said interaction server and that provides each</u>-said interactive service, based on said extracted
set of said information specifying said interactive service and said information specifying said
service time of <u>that</u>-said interactive service, and

wherein said interactive service can be provided from said interactive server over a first communication path to said broadcasting receiver, said data broadcasting can be provided from said broadcasting server over a second communication path to said broadcasting receiver, and said set of information specifying said interactive service and information specifying said service time of said interactive service is transmitted from said broadcasting server over a third communication path to said interactive server.

8. (CURRENTLY AMENDED) The method as set forth in claim 7, wherein in said controlling said activation and deactivation, if it is judged that a service start time has arrived based on said information specifying said service time, a flag of the corresponding interactive service is set ON,

if it is judged that a service termination time has arrived based on said information specifying said service time, a flag of the corresponding interactive service is set OFF, and an interactive <u>application service</u> is activated or deactivated based on said flag of said interactive service.

9. (CURRENTLY AMENDED) The method as set forth in claim 7, further comprising:

acquiring information indicating an operating state of said interactive application service; and

transmitting said information indicating said operating state of said interactive application service to a broadcasting server associated with said data broadcasting.

10. (CURRENTLY AMENDED) The method as set forth in claim 9, wherein said acquiring includes specifying that the interactive <u>application service</u> is active in a case where a response indicating that the interactive <u>application service</u> is active is received from the

interactive service.

11. (CURRENTLY AMENDED) A program embodied on a computer readable medium, for causing a broadcasting server to control interlock of an interactive service with data broadcasting, said program comprising steps for:

acquiring information specifying an interactive service associated with data broadcasting and information specifying a service time of said interactive service, wherein said interactive service can be provided from an interactive server over a first communication path to a broadcasting receiver, and said data broadcasting can be provided from said broadcasting server over a second communication path to said broadcasting receiver;

transmitting over a third communication path, said information specifying said interactive service and said information specifying said service time, which are acquired in said acquiring, to said interactive server, which is independent from said broadcasting server, and which executes activates and deactivates an interactive application based on said information specifying said service time, wherein said interactive application is executed by said interactive server and that provides said interactive service over said first communication path to said broadcasting receiver in response to an access from said broadcasting receiver; and

transmitting over said second communication path, to said broadcasting receiver without transferring through said interactive server, data broadcasting contents associated with said interactive service at said service time specified by said information specifying said service time, wherein said data broadcasting contents include link information to access said interactive application executed by said interactive server.

- 12. (PREVIOUSLY PRESENTED) The program as set forth in claim 11, wherein said acquiring includes extracting said information specifying said interactive service and said information specifying said service time from interactive service organization information.
- 13. (PREVIOUSLY PRESENTED) The program as set forth in claim 12, wherein said acquiring further includes extracting second information specifying said interactive service from content information of said data broadcasting and comparing the second extracted information with said information specifying said interactive service extracted from said interactive service organization information.

- 14. (PREVIOUSLY PRESENTED) The program as set forth in claim 11, wherein in said transmitting over said third communication path, said information specifying said interactive service and said information specifying said service time, together with content information of said data broadcasting, are distributed to said interactive server.
- 15. (CURRENTLY AMENDED) The program as set forth in claim 11, further comprising generating information as to whether each interactive <u>application service</u> must be activated at present based on said information specifying said service time of each said interactive service, and

wherein in said transmitting over said third communication path, said information as to whether each said interactive <u>application service</u>-must be activated at present is further transmitted.

- 16. (CURRENTLY AMENDED) The program as set forth in claim 11, further comprising, if information indicating an operating state of said interactive <u>application</u> service is received from said interactive server, deleting or invalidating designation of an inactive interactive <u>application</u> service-in content information of said data broadcasting.
- 17. (CURRENTLY AMENDED) A program embodied on a computer readable medium, for causing an interactive server that provides an interactive service associated with data broadcasting to a broadcasting receiver, to control interlock of the interactive service with said data broadcasting, said program comprising steps for:

receiving and storing a set of information specifying an interactive service and information specifying a service time of said interactive service from a broadcasting server in one or a plurality of broadcasting stations, wherein said broadcasting server is managed independently from said interactive server;

extracting, from the stored set of said information, a set of information specifying a specific interactive service having a relation to said interactive server and information specifying a service time of said specific interactive service—by using the received information specifying said interactive service; and

controlling activation and deactivation of an interactive application that is executed by said interaction server and that provides each said interactive service, based on said extracted

set of said information specifying said interactive service and said information specifying said service time of that said interactive service, and

wherein said interactive service can be provided from said interactive server over a first communication path to said broadcasting receiver, said data broadcasting can be provided from said broadcasting server over a second communication path to said broadcasting receiver, and said set of information specifying said interactive service and information specifying said service time of said interactive service is transmitted from said broadcasting server over a third communication path to said interactive server.

18. (CURRENTLY AMENDED) The program as set forth in claim 17, wherein in said controlling said activation and deactivation, if it is judged that a service start time has arrived based on said information specifying said service time, a flag of the corresponding interactive service is set ON.

if it is judged that a service termination time has arrived based on said information specifying said service time, a flag of the corresponding interactive service is set OFF, and an interactive <u>application service</u> is activated or deactivated based on said flag of said interactive service.

19. (CURRENTLY AMENDED) The program as set forth in claim 17, further comprising:

acquiring information indicating an operating state of said interactive <u>application</u> service; and

transmitting said information indicating said operating state of said interactive application service to a broadcasting server associated with said data broadcasting.

- 20. (CURRENTLY AMENDED) The program as set forth in claim 19, wherein said acquiring includes specifying that the interactive <u>application service</u> is active in a case where a response indicating that the interactive <u>application service</u> is active is received from the interactive service.
- 21. (CURRENTLY AMENDED) A broadcasting server for controlling interlock of an interactive service with data broadcasting, said broadcasting server comprising:

an acquiring unit that acquires information specifying an interactive service associated

with data broadcasting and information specifying a service time of said interactive service, wherein said interactive service can be provided from an interactive server over a first communication path to a broadcasting receiver, and said data broadcasting can be provided from said broadcasting server over a second communication path to said broadcasting receiver;

a first transmitter that transmits over a third communication path, said information specifying said interactive service and said information specifying said service time, which are acquired by said acquiring unit, to said interactive server, which is independent from said broadcasting server, and which executes activates and deactivates an interactive application based on said information specifying said service time, wherein said interactive application is executed by said interactive server and that provides said interactive service over said first communication path to said broadcasting receiver in response to an access from said broadcasting receiver; and

a second transmitter that transmits over said second communication path, to said broadcasting receiver without transferring through said interactive server, data broadcasting contents associated with said interactive service at said service time specified by said information specifying said service time, wherein said data broadcasting contents include link information to access said interactive application executed by said interactive server.

- 22. (PREVIOUSLY PRESENTED) The broadcasting server as set forth in claim 21, wherein said acquiring unit includes a first extractor that extracts said information specifying said interactive service and said information specifying said service time from interactive service organization information.
- 23. (PREVIOUSLY PRESENTED) The broadcasting server as set forth in claim 22, wherein said acquiring unit further includes a second extractor that extracts second information specifying said interactive service from content information of said data broadcasting, and a unit that compares the second extracted information with said information specifying said interactive service extracted from said interactive service organization information.
- 24. (PREVIOUSLY PRESENTED) The broadcasting server as set forth in claim 21, wherein in said first transmitter distributes said information specifying said interactive service and said information specifying said service time, together with content information of said data broadcasting to said interactive server.

25. (CURRENTLY AMENDED) The broadcasting server as set forth in claim 21, further comprising a generator that generates information as to whether each interactive application service must be activated at present based on said information specifying said service time of each said interactive service, and

wherein said first transmitter further transmits said information as to whether each said interactive application service must be activated at present.

- 26. (CURRENTLY AMENDED) The broadcasting server as set forth in claim 21, further comprising a unit that deletes or invalidates designation of an inactive interactive application service in content information of said data broadcasting, if information indicating an operating state of said interactive application service is received from said interactive server.
- 27. (CURRENTLY AMENDED) An interactive server that provides an interactive service associated with data broadcasting to a broadcasting receiver, said interactive server comprising:

a receiver including a storage that receives and stores a set of information specifying an interactive service and information specifying a service time of said interactive service from a broadcasting server in one or a plurality of broadcasting stations, wherein said broadcasting server is managed independently from said interactive server;

an extractor that extracts a set of information, from the stored set of said information, specifying a specific interactive service having a relation to said interactive server and information specifying a service time of said specific interactive service; and

a controller that controls activation and deactivation of <u>an interactive application that is</u>
<u>executed by said interaction server and that provides each</u>-said interactive service, based on
said extracted set of said information specifying said interactive service and said information
specifying said service time of <u>that said</u> interactive service, and

wherein said interactive service can be provided from said interactive server over a first communication path to said broadcasting receiver, said data broadcasting can be provided from said broadcasting server over a second communication path to said broadcasting receiver, and said set of information specifying said interactive service and information specifying said service time of said interactive service is transmitted from said broadcasting server over a third communication path to said interactive server.

28. (CURRENTLY AMENDED) The interactive server as set forth in claim 27, wherein if it is judged that a service start time has arrived based on said information specifying said service time, said controller sets a flag of the corresponding interactive service ON,

if it is judged that a service termination time has arrived based on said information specifying said service time, said controller sets a flag of the corresponding interactive service OFF, and

said controller activates or deactivates the interactive <u>application</u> service on the basis of said flag of said interactive <u>application</u> service.

29. (CURRENTLY AMENDED) The interactive server as set forth in claim 27, further comprising:

an acquiring unit that acquires information indicating an operating state of said interactive <u>application service</u>; and

a transmitter that transmits said information indicating said operating state of said interactive application service to a broadcasting server associated with said data broadcasting.

30. (CURRENTLY AMENDED) The interactive server as set forth in claim 29, wherein said acquiring unit comprises a unit that specifies that the interactive <u>application service</u> is active in a case where a response indicating that the interactive <u>application service</u> is active is received from the interactive service.